

1 CLAIMS

2 What is claimed is:

3 1. A method for printing N collated copies of a document on a printer, N being an integer
4 greater than one, the method comprising:

5 determining whether the printer has capacity to print N collated copies of the
6 document; and

7 if the printer has insufficient capacity, then performing the following step N times:
8 sending a single copy of the document to the printer.

9
10 2. The method of claim 1 wherein the capacity is a memory capacity.

11
12 3. The method of claim 2 wherein the capacity is a memory capacity to store one copy of
13 the document in a print ready form.

14
15 4. The method of claim 1 further comprising:
16 storing a copy of the document.

17
18 5. The method of claim 1 wherein the determining step comprises:
19 sending to the printer a print job requesting N collated copies of the document; and
20 awaiting receipt from the printer of a message regarding a sufficiency of the
21 printer's capacity.

22
23 6. The method of claim 5 wherein the message regarding the sufficiency of the printer's
24 capacity is initiated by the printer.

25
26 7. The method of claim 5 wherein the determining step further comprises:
27 detecting when a first copy of the document has been printed by the printer;
28 if the first copy of the document has been printed by the printer before receipt from
29 the printer of an indication that the printer's capacity is insufficient, then concluding that
30 the printer's capacity is sufficient.

- 1
- 2 **8.** The method of claim 5 wherein the awaiting step comprises:
- 3 polling the printer.
- 4
- 5 **9.** The method of claim 8 wherein the polling step comprises:
- 6 querying a PML object.
- 7
- 8 **10.** The method of claim 8 wherein the polling step comprises:
- 9 querying an SNMP object.
- 10
- 11 **11.** The method of claim 8 wherein the polling step comprises:
- 12 embedding a status request in a print job; and
- 13 sending the print job to the printer.
- 14
- 15 **12.** A computer readable medium on which is embedded a computer program, the
- 16 program comprising one or more instructions for performing a method of printing N
- 17 collated copies of a document on a printer, N being an integer greater than one, the
- 18 method comprising:
- 19 determining whether the printer has capacity to print N collated copies of the
- 20 document; and
- 21 if the printer has insufficient capacity, then performing the following step N times:
- 22 sending a single copy of the document to the printer.
- 23
- 24 **13.** The computer readable medium of claim 12 wherein the capacity is a memory
- 25 capacity.
- 26
- 27 **14.** The computer readable medium of claim 13 wherein the capacity is a memory
- 28 capacity to store one copy of the document in a print ready form.
- 29
- 30

- 1 **15.** The computer readable medium of claim 12 further comprising:
2 storing a copy of the document.
3
- 4 **16.** The computer readable medium of claim 12 wherein the determining step comprises:
5 sending to the printer a print job requesting N collated copies of the document; and
6 awaiting receipt from the printer of a message regarding the sufficiency of the
7 printer's capacity.
8
- 9 **17.** The computer readable medium of claim 16 wherein the awaiting step comprises:
10 polling the printer.
11
- 12 **18.** An apparatus for processing an incoming print job requesting N collated copies of a
13 document on a printer, N being an integer greater than one, the apparatus comprising:
14 a memory configured to store the document;
15 a spooler, connected to the memory, configured to send an outgoing print job to
16 the printer;
17 a status agent configured to receive from the printer information regarding whether
18 the printer has sufficient capacity to collate the document; and
19 a control logic, connected the spooler and the status agent, the control logic
20 controlling the spooler on the basis of the information regarding whether the printer has
21 sufficient capacity to collate the document.
22
- 23 **19.** The apparatus of claim 18 further comprising:
24 a receive port, connected to the memory, by which the incoming print job can be
25 received.
26
- 27 **20.** The apparatus of claim 18 wherein the capacity is a memory capacity, and wherein
28 the control logic is configured to control the spooler to send a single copy of the document
29 to the print N times if the status agent determines that the printer has insufficient memory
30 capacity.